Staying GREAT Online – Innovations to Reach Bean Breeders on the Run

Farming and food production continue as in-person activities, as they must, even in these COVID times. Our cross-country collaboration on bean breeding thus continues, yet with even greater need for innovation than usual. Rising to that challenge, the Gender Responsive Researchers Equipped for Agricultural Transformation (GREAT) team, working closely with colleagues at the Feed the Future Innovation Lab for Legume Systems Research, created a pilot initiative to adapt GREAT's normally multi-week, in-person format to a shorter set of highly customized learning and working sessions, all online.

The resulting workshop on "Gender Responsive Plant Breeding" was literally created "on the run" for our Bruchid Resistant Bean Team (Figure 1) due to a tight project timeline, with first phase field days in Zambia to take place in just a few months. This team of Primary Investigators (PI) and their gender focal point counterparts - an exceptional group of bean breeders and social scientists representing four countries - have already launched an initiative for "Genetic Improvement of Dry Beans for Bruchid Resistance for Southern Africa", a commissioned activity of the Legume System Innovation Lab. Dr. Juan Osorno (North Dakota State University), the lead PI, collaborated closely with Dr. Andrea Allen, the Legume Systems Innovation Lab (LSIL) Gender Advisor, and the GREAT program team to craft the resulting course design. That design unfolded in capacity building and work planning applications just last month – November 12-16 – thanks to the expertise of the GREAT program team at Makerere University (Uganda), led by Dr. Margaret Mangheni, Dr. Eva Weltzien, as GREAT consultant, and a $15,000 supplementary grant provided by LSIL.

> **Figure 1. Bruchid Resistant Bean Team Participants**
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> United States
> Juan M. Osorno, PI, North Dakota State University
> Carlos Urrea, Co-PI, University of Nebraska
> Zambia
> Kelvin Kamfwa, Co-PI, University of Zambia
> Crisanty Chamos, Gender Focal Person, CIAT/PABRA
> Malawi
> Virginia Chisale, Co-PI, Department of Agricultural Research & Technical Services (DARTS)
> Hilda Kabuli, Gender Focal Person (DARTS)
> Mozambique
> Celestina Jochua, Co-PI, Investigação Agraria de Mozambique (IIAM)
> Maria da Luz Quinhentos, Gender Focal Person (IIAM)

> **Figure 2. Participant Feedback**
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> "I gained more insights on how to incorporate gender in breeding programs. Particularly, I learned new concepts such as product and customer profiles. I also learned about the do no harm and benefits questions." (social scientist, woman)
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> "I am aware of final product profile; interdisciplinary research; mixed methods in gender responsive research; gender; gender impact." (biophysical scientist, man)

Based on workshop outcomes, we have judged this pilot effort a success, at the same time reflecting on lessons learned for future process improvements. Immediate workshop outcomes include 1) a notable increase in participant knowledge of Gender Responsive Breeding (Figure 2) and 2) a revised workplan designed to strengthen use of gender responsive tools for data collection and analysis and equitable inclusion of women and men priorities for common bean target traits. With continued learning and innovation along the way, we expect these initial outcomes to better ensure the longer-term project objective that bruchid-resistant common bean varieties are indeed adopted by both women and men small scale farmers in Zambia, Malawi, and Mozambique. To learn more, stay tuned for our next update on how this workplan continues evolving and is deployed.